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NEWS 22 MAR 30 RDISCLOSURE reloaded with enhancements
NEWS 23 APR 02 JICST-EPLUS removed from database clusters and STN
NEWS 24 APR 30 GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25 APR 30 CHEMCATS enhanced with 1.2 million new records
NEWS 26 APR 30
                CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27 APR 30
                INPADOC replaced by INPADOCDB on STN
NEWS 28 MAY 01
                New CAS web site launched
NEWS 29 MAY 08
                CA/CAplus Indian patent publication number format defined
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
             MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP)
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L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:262218 CAPLUS

DOCUMENT NUMBER:

130:269681

ENTRY DATE:

Entered STN: 29 Apr 1999

TITLE:

A process for the preparation of hydrogen and carbon

monoxide

INVENTOR(S):

De Jong, Krijn Pieter; Pieterse, Coen Willem Johannes;

Schoonebeek, Ronald Jan

PATENT ASSIGNEE(S):

Shell Internationale Research Maatschappij BV, Neth.

SOURCE:

PCT Int. Appl., 21 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

INT. PATENT CLASSIF.:

MAIN:

C01B003-00

SECONDARY:

C01B003-38; C01B003-32; H01M008-06

CLASSIFICATION:

52-2 (Electrochemical, Radiational, and Thermal Energy

Technology)

Section cross-reference(s): 49, 51

FAMILY ACC. NUM. COUNT:

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		ECLA	C01B003/32B; C01B003/38D; H01M008/06B2; H01M008/06C
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ABSTRACT:

A catalytic partial oxidation process for the preparation of hydrogen and carbon monoxide from an organic feedstock comprises contacting the feedstock and an oxygen-containing gas, in amts. giving an oxygen-to-carbon ratio of from 0.3 to 0.8, with a catalyst at a gas hourly space velocity in the range of from 100,000 to 10,000,000 NL/kg-h. The organic feedstock used is a feedstock containing hydrocarbons and/or oxygenates, which is liquid under conditions of standard temperature

and pressure and has an average carbon number of at least 6. The invention further relates to an elec.-energy generating process, an elec.-energy generating system, and transport means provided with this elec.-energy generating system.

SUPPL. TERM: hydrogen carbon monoxide prepn process; fuel cell power generation system

INDEX TERM: Alcohols, reactions

ROLE: RCT (Reactant); RACT (Reactant or reagent)

(aliphatic; process for preparation of hydrogen and carbon

monoxide)

INDEX TERM: Power

(generation; process for preparation of hydrogen and carbon

monoxide)

INDEX TERM: Oxidation

Oxidation catalysts

(partial; process for preparation of hydrogen and carbon

monoxide)

INDEX TERM: Fuel cells

Water gas shift reaction

(process for preparation of hydrogen and carbon monoxide)

INDEX TERM: Gas oils

(synthetic; process for preparation of hydrogen and carbon

monoxide)

INDEX TERM: Kerosene

ROLE: RCT (Reactant); RACT (Reactant or reagent)

(synthetic; process for preparation of hydrogen and carbon

monoxide)

INDEX TERM: 7439-88-5, Iridium, uses 7440-16-6, Rhodium, uses

7440-67-7, Zirconium, uses

ROLE: CAT (Catalyst use); USES (Uses)

(process for preparation of hydrogen and carbon monoxide)

INDEX TERM: 630-08-0P, Carbon monoxide, preparation 1333-74-0P,

Hydrogen, preparation

ROLE: IMF (Industrial manufacture); PREP (Preparation)

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INDEX TERM:
                    60-29-7, Ether, reactions
                   ROLE: RCT (Reactant); RACT (Reactant or reagent)
                       (process for preparation of hydrogen and carbon monoxide)
                          THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
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REFERENCE(S):
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                              V21, P11
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                    (6) Nippon Seikosho Kk; JP 58091002 A 1983 CAPLUS
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     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         2000:15108 CAPLUS
DOCUMENT NUMBER:
                         132:80459
ENTRY DATE:
                         Entered STN: 07 Jan 2000
TITLE:
                         Catalytic partial oxidation of hydrocarbons with a
                         rhodium-iridium alloy catalyst
                         Schaddenhorst, David; Schoonebeek, Ronald Jan
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Shell Internationale Research Maatschappij BV, Neth.
SOURCE:
                         PCT Int. Appl., 19 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
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INT. PATENT CLASSIF.:

MAIN:

C01B003-38

(process for preparation of hydrogen and carbon monoxide)

SECONDARY: B01J023-46

CLASSIFICATION:

49-1 (Industrial Inorganic Chemicals) Section cross-reference(s): 45, 51, 52

FAMILY ACC. NUM. COUNT: 2

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                        [ICS,7,C*]; B01J0023-46 [ICS,7]
                IPCR
                       B01J0023-46 [I,C*]; B01J0023-46 [I,A]; B01J0037-00
                        [I,C*]; B01J0037-02 [I,A]; C01B0003-00 [I,C*];
                        C01B0003-38 [I,A]; C01B0003-40 [I,A]; H01M0008-06
                        [I,C*]; H01M0008-06 [I,A]
                NCL
                        252/373.000; 423/650.000; 423/651.000; 502/325.000;
                        502/326.000; 502/327.000
                       B01J023/46; B01J023/46D; B01J023/46F; B01J037/02M4;
                ECLA
                       C01B003/38D; C01B003/40
ZA 2001000317
                IPCI
                       B01J [ICM, 7]; C01B [ICS, 7]
ZA 2001000316
                IPCI
                       B01J [ICM, 7]; C01B [ICS, 7]
US 2004228792
                       C01B0003-26 [ICM,7]; C01B0003-00 [ICM,7,C*]
                IPCI
                IPCR
                       B01J0023-46 [I,C*]; B01J0023-46 [I,A]; B01J0037-00
                        [I,C*]; B01J0037-02 [I,A]; C01B0003-00 [I,C*];
                       C01B0003-38 [I,A]; C01B0003-40 [I,A]
                NCL
                       423/651.000
                ECLA
                       B01J023/46; B01J023/46D; B01J023/46F; B01J037/02M4;
                       C01B003/38D; C01B003/40
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ABSTRACT:

The invention relates to a process for catalytic partial oxidation of a hydrocarbonaceous feedstock. The process comprises contacting a feed comprising the hydrocarbonaceous feedstock and an O-containing gas with a catalyst comprising metals of Group VIII of the Periodic Table of Elements, wherein the

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Group VIII metals are at least Rh and Ir in intimate association with each other.
SUPPL. TERM:
                   catalytic partial oxidn hydrocarbon synthesis gas
INDEX TERM:
                   Hydrocarbons, processes
                   ROLE: PEP (Physical, engineering or chemical process); PROC
                    (Process)
                       (catalytic partial oxidation of)
INDEX TERM: .
                   Natural gas, processes
                   ROLE: PEP (Physical, engineering or chemical process); PROC
                    (Process)
                       (catalytic partial oxidation of hydrocarbons with
                      rhodium-iridium alloy catalyst)
INDEX TERM:
                   Synthesis gas manufacturing
                       (catalytic partial oxidation of hydrocarbons with
                      rhodium-iridium alloy catalyst for)
INDEX TERM:
                   Oxidation
                       (catalytic; catalytic partial oxidation of hydrocarbons)
INDEX TERM:
                   74-82-8, Methane, processes
                   ROLE: PEP (Physical, engineering or chemical process); PROC
                    (Process)
                       (catalytic partial oxidation of hydrocarbons with
                      rhodium-iridium alloy catalyst)
INDEX TERM:
                   7429-90-5, Aluminum, uses 7439-88-5, Iridium, uses
                   7439-91-0, Lanthanum, uses 7439-95-4, Magnesium, uses
                   7440-04-2, Osmium, uses 7440-06-4, Platinum, uses
                   7440-16-6, Rhodium, uses 7440-21-3, Silicon, uses
                   7440-32-6, Titanium, uses 7440-39-3, Barium, uses
                   7440-58-6, Hafnium, uses
                                               7440-67-7, Zirconium, uses
                   37364-99-1
                   ROLE: CAT (Catalyst use); USES (Uses)
                       (in catalyst for partial oxidation of hydrocarbons)
REFERENCE COUNT:
                         THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
                         RECORD.
REFERENCE(S):
                   (1) Shell Int Research; EP 0629578 A 1994 CAPLUS
                    (2) Snam Progetti; GB 2274284 A 1994 CAPLUS
=> s cataly? (2a) partial oxid?
       1378285 CATALY?
        395866 PARTIAL
          1003 PARTIALS
        396468 PARTIAL
                 (PARTIAL OR PARTIALS)
       3043647 OXID?
         11501 PARTIAL OXID?
                 (PARTIAL (W) OXID?)
          2691 CATALY? (2A) PARTIAL OXID?
L10
=> s 110 and hydrocarbon (s) oxygenat? compound?
        339114 HYDROCARBON
        340689 HYDROCARBONS
        524286 HYDROCARBON
                 (HYDROCARBON OR HYDROCARBONS)
         45037 OXYGENAT?
        997502 COMPOUND?
       1160232 COMPD
       1733147 COMPDS
       2479882 COMPD
                 (COMPD OR COMPDS)
       2937477 COMPOUND?
                 (COMPOUND? OR COMPD)
          2118 OXYGENAT? COMPOUND?
                 (OXYGENAT? (W) COMPOUND?)
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578 HYDROCARBON (S) OXYGENAT? COMPOUND?

=> d his

(FILE 'HOME' ENTERED AT 15:04:13 ON 11 MAY 2007)

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FILE 'CAPLUS' ENTERED AT 15:05:05 ON 11 MAY 2007
              1 S WO9919249/PN
L1
L2
              0 S WO0000426/PN
L3
              0 S WO20000426/PN
L4
              0 S WO200426/PN
L5
              0 S EP 9919249/PN
L6
              0 S WO 20000426/PN
L7
             0 S WO 2000426/PN
L8
             0 S WO 20000426/PN
L9
              1 S WO 200000426/PN
L10
           2691 S CATALY? (2A) PARTIAL OXID?
              3 S L10 AND HYDROCARBON (S) OXYGENAT? COMPOUND?
L11
=> s 111 not 11 not 19
             3 L11 NOT L1 NOT L9
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=> d 112 ibib ab 1-3

L12 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:238918 CAPLUS

DOCUMENT NUMBER: 142:282643

TITLE: Catalytic partial

oxidation process for producing synthesis gas

INVENTOR(S): Basini, Luca; Bartolini, Andrea; Lupi, Giancarlo;

Clerici, Gabriele Carlo Ettore

PATENT ASSIGNEE(S): Eni S.p.A., Italy; Enitecnologie S.p.A.

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.								APPLICATION NO.					DATE				
							-	- -					- -		- -	_		
		2005						2005	0317	1	WO 2	004-	EP10	169		2	0040	909
	WO	2005	0237	10		A3			0526					•				
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
																FI,		
																KR,		
																MZ,		
																SK,		
																ZA,		
		RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,
				TD,														
	CA	2538	404			A1		2005	0317	(CA 2	004-2	25384	404		2	0040	909
	EP	1663	856			A2		2006	0607]	EP 20	004-	7650	92		20	0040	909
																SE,		
									BG,						·	•		,
	US	2007	10596	62		A1		2007	0510	1	JS 2	007-	5715:	38		20	0070	117
PRIORITY APPLN. INFO.:												39			00309			
WO 2004-EP10169 W 200409																		
AB	Ар	parti	al o	xidat	cion	prod	cess	of :	liqui	id fi	iels	se	lecte	ed fi	rom 1	hvdro	ocarl	oon
	and	l/or	oxvae	enate	ed co	ompde		toge	ther	wit	n de	20011				,	Juli	2011
		-,	1 31			pu	/			** 1 C1	. yaı	Juur	_					

AE fuels, selected from hydrocarbon compds., natural gas and LPG, includes premixing the reagents with oxygen or air, and optionally with vapor and/or CO2 and heating to 25-400°; reacting the mixture in the catalytic zone, at inlet temps. ranging from 50 to 500° and space velocities ranging from 1,000 to 1,000,000 Nl reagents/L cat x h, reaching temps. ranging from 450 to 1350°. The reagents may include heavy residues from oil distillation The catalyst system consists of oxides, oxynitrides, nitrides, carbides, and/or oxycarbides containing Rh, Ir, Ni, Fe, Co, and/or Mo.

L12 .ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1993:233171 CAPLUS

DOCUMENT NUMBER:

118:233171

TITLE:

Partial oxidation of hydrocarbons and

oxygenated compounds on perovskite

oxides

AUTHOR(S):

Shimizu, T.

CORPORATE SOURCE:

Hakodate Natl. Coll. Technol., Tokura, 042, Japan

SOURCE:

Chemical Industries (Dekker) (1993), 50 (Properties and

Applications of Perovskite-Type Oxides), 289-305

CODEN: CHEIDI; ISSN: 0737-8025

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

English

AB A review with 42 refs.

L12 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1993:80226 CAPLUS

DOCUMENT NUMBER:

118:80226

TITLE:

Partial oxidation of hydrocarbons and oxygenated compounds on perovskite

oxides

AUTHOR(S):

SOURCE:

Shimizu, T.

CORPORATE SOURCE:

Hakodate Natl. Coll. Technol., Hakodate, 042, Japan Catalysis Reviews - Science and Engineering (1992),

34(4), 355-71

CODEN: CRSEC9; ISSN: 0161-4940

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

English

AB Effect of temperature and surface oxygen for partial oxidation of hydrocarbons were

reviewed; partial oxidation of alcs. were reviewed; partial oxidation is based on the use of oxygen as co-reactant; 42 refs.

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:238918 CAPLUS

DOCUMENT NUMBER: 142:282643

TITLE: Catalytic partial

oxidation process for producing synthesis gas
INVENTOR(S): Basini, Luca; Bartolini, Andrea; Lupi, Giancarlo;

Clerici, Gabriele Carlo Ettore

PATENT ASSIGNEE(S): Eni S.p.A.; Italy; Enitecnologie S.p.A.

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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APPLICATION NO. DATE
    PATENT NO.
                    KIND DATE
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                                                               -----
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    WO 2005023710 A2 20050317 WO 2005023710 A3 20050526
                                       WO 2004-EP10169
                                                              20040909
                       A3
    WO 2005023710
                              20050526
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
            SN, TD, TG
    CA 2538404
                              20050317
                        A1
                                       CA 2004-2538404
                                                               20040909
    EP 1663856
                        A2
                              20060607
                                       EP 2004-765092
                                                               20040909
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
    US 2007105962
                              20070510
                                         US 2007-571538
                       A1
                                                               20070117
                                         IT 2003-MI1739
PRIORITY APPLN. INFO.:
                                                            A 20030911
                                         WO 2004-EP10169
                                                            W 20040909
```

AB A partial oxidn. process of liquid fuels, selected from hydrocarbon and/or oxygenated compds., together with gaseous fuels, selected from hydrocarbon compds., natural gas and LPG, includes premixing the reagents with oxygen or air, and optionally with vapor and/or CO2 and heating to 25-400°; reacting the mixture in the catalytic zone, at inlet temps. ranging from 50 to 500° and space velocities ranging from 1,000 to 1,000,000 Nl reagents/L cat x h, reaching temps. ranging from 450 to 1350°. The reagents may include heavy residues from oil distn. The catalyst system consists of oxides, oxynitrides, nitrides, carbides, and/or oxycarbides containing Rh, Ir, Ni, Fe, Co, and/or Mo.

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:452964 CAPLUS

DOCUMENT NUMBER: 115:52964

TITLE: The conversion of high-pollutant undesirable oil

residues into environmentally acceptable hydrogen fuel

AUTHOR(S): Abdel-Aal, H. K.

CORPORATE SOURCE: Dep. Chem. Eng., King Fahd Univ. Pet. Miner., Dhahran,

31261, Saudi Arabia

SOURCE: Advances in Hydrogen Energy (1990), 8 (Hydrogen Energy

Prog. 8, Vol. 1), 357-75

CODEN: AHENDB; ISSN: 0276-2412

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Journal; General Re

AB A review with 7 refs. After presenting some of the characteristics of

heavy petroleums and petroleum residues (especially from the Middle East), a comparison is made between the upgrading approach using a chemical conversion (e.g., hydrocracking or hydroprocessing) and non-catalytic partial oxidn.-gasification. The selection of a particular process depends largely on the quality of the residue that can be conveniently or practically handled by a refinery. For those feedstocks with significant concns. of asphaltenes, S, Ni, V, etc., hydrocracking and hydroprocessing will require expensive upgrading equipment. Such residues would have more value as gasification-partial oxidation feedstocks for manufacture of H or synthesis gas, which can be easily used within the refinery or upgraded to more valuable products.

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1979:57737 CAPLUS

DOCUMENT NUMBER: 90:57737

TITLE: Gasification process

INVENTOR(S): Yoshida, Kenji; Isogaya, Kazuyoshi; Tomita, Tadayoshi;

Kikuchi, Katsutoshi; Kuboyama, Hisaharu

PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan

SOURCE:

U.S., 7 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 4115074	Α	19780919	US 1976-751168	19761216		
JP 52078901	Α	19770702	JP 1975-155111	19751226		
JP 57010916	В	19820301				

PRIORITY APPLN. INFO.: JP 1975-155111 A 1975122

H-containing gas mixts. are manufactured by the partial oxidn. of hydrocarbon mixts. containing residual oils at $\geq 850^\circ$ in a fixed catalyst bed without the deposition of C. Before gasification the hydrocarbon mixture is atomized with a mixture of O-containing gas and steam without forming eddy currents, with the residence time in the atomizing zone being 0.05-5 s. The atomizing zone has a cylindrical or frustoconical shape, the inside diameter at the top end of the zone is twice as large as the diameter of the atomization nozzle, and the angle of the sidewall of the atomizing zone is smaller than the angle of the streams from the nozzle. Thus, a petroleum distn. residue (1.0 kg/h) was gasified in this apparatus at 1000° by steam (2.4 kg/h) and air (3.6 m3/h) at 0.2 kg/cm2 (gage), with Ca aluminate as the catalyst. No C deposition was observed at residence times in the atomizing zone of 0.05 and 0.2 s, but sooty C was deposited at 0.02 s residence time.